UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/648,697	08/25/2000	Mark E. Redding	230074.0227	6958

7590   10/09/2003

Ted R Rittmaster Esq
Foley & Lardner
2029 Century Park East
Suite 3500
Los Angeles, CA 90067

EXAMINER
REAGAN, JAMES A

ART UNIT	PAPER NUMBER
3621	

DATE MAILED: 10/09/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>23 July 2003</u> .

2a)☒ This action is **FINAL.**   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-36</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-36</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

    If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

       1.☐ Certified copies of the priority documents have been received.

       2.☐ Certified copies of the priority documents have been received in Application No. _____ .

       3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

    a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)	4)☐ Interview Summary (PTO-413) Paper No(s). _____ .
2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)	5)☐ Notice of Informal Patent Application (PTO-152)
3)☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .	6)☐ Other:

DETAILED ACTION

Status of Claims

1.   This action is in response to the amendment received on 23 July 2003.

2.   Claims 1, 3-5, 11, 13, and 14 have been amended.

3.   Claims 20-36 have been added.

4.   Claims 1-36 have been examined.

5.   The rejections of claims 1-19 have been updated to reflect the amended

6.   The rejections of claims 20-36 are original.

RESPONSE TO ARGUMENTS

7.   Applicant's arguments with respect to claims 1-19 have been considered but are moot in

view of the new ground(s) of rejection.

8.   The following is a **Final Rejection** of all claims and associated limitations pending in the

current application as amended in paper #7.

Claim Rejections - 35 USC § 103

9.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

10.   Claims 1-5 and 11-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Wyman (US 5,204,897) in view of Ohran et al (US 5,978,565), further in view of

(Badovinatz et al. (US 5,704,032), and further in view of Novaes (US 6,507,863 B2).

Examiner's note: Examiner has pointed out particular references contained in the prior

art of record in the body of this action for the convenience of the Applicant. Although

the specified citations are representative of the teachings in the art and are applied to

the specific limitations within the individual claim, other passages and figures may

apply. Applicant, in preparing the response, should consider fully the *entire* reference

as potentially teaching all or part of the claimed invention, as well as the context of the

passage as taught by the prior art or disclosed by the Examiner.

Claims 1 and 11:

With regard to the limitation of *at least one client computer coupled to the*

communication network for requesting authorizations to use the protected software,

Wyman discloses a license management system (abstract). With regard to the

limitation of *a pool of license servers coupled to the communication network,* Ohran

discloses backup computer servers (abstract). With regard to the limitation of *each*

license server programmed managing a distribution of one or more allocations to at

least one client computer to use the protected software Wyman, in Figure 1 and

associated text, discloses license servers end users receiving protected software.

Wyman discloses maintaining a license data record of product use and

authorizations (column 10, lines 30-35). The combination of Wyman/Ohran does not

specifically disclose *the pool of license servers including a current leader server*

programmed for maintaining a record of allocations for license servers in the pool. However, Badovinatz discloses designation a new leader in a group of processors when the current leader fails (abstract). Novaes discloses Dynamic Multicast Routing (DRM) ion the abstract, and in column 10, lines 38-42, Novaes discloses electing a new group leader from a Group leader membership list. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine Wyman/Ohran and modify it with Badovinatz and Novaes because, as the applicant has pointed out in the background of the specification, if the primary server has gone down, then a back up server may communicate with the client machine to authorize the use of an application, thereby taking over license management function, thereby increasing efficiency.

Claims 2 and 12:

With regard to the limitation of *the pool of license servers further including at least one follower server, each follower server programmed for managing the distribution of allocations for that particular follower server,* the rejections of claims 1 and 11 as shown above disclose license servers, back up servers, and leader and follower servers. Wyman, in Figure 1 and related text, shows severs storing license information in a local database and delegating authorizations through delegate servers (column 11, lines 12-16). Wyman also discloses delagatee servers i.e. follower servers maintaining similar logs (column 10, lines 30-40).

Claims 3 and 13:

With regard to the limitations of:

o   *a least one client computer coupled to the communication network*

      for requesting authorizations to use the protected software;

o   *a pool of license servers coupled to the communication network, each*

      license server programmed for managing a distribution of one or more

      allocations to at least one client computer to use the protected software,

      the pool of license servers including a current leader server programmed

      for maintaining a record of allocations for license servers in the pool;

o   *wherein the pool of license servers includes at least one follower server,*

      each follower server programmed for managing the distribution of

      allocations for that particular follower server;

See the rejections of claims 1 and 11 above.

With regard to the limitation of *each license server includes memory for storing a*

status of the allocations for that particular license server, Wyman, in Figure 1 and

related text, shows severs storing license information in a local database and

delegating authorizations through delegate servers (column 11, lines 12-16). Wyman

also discloses delagatee servers i.e. follower servers maintaining similar logs (column

10, lines 30-40).

With regard to the limitation of *wherein each follower server is programmed for*

communicating the status of the allocations for that particular follower server to the

current leader server, Wyman discloses license servers a shown above, Badovinatz

discloses leader and follower servers as a shown above, and Ohran discloses back up

servers and transferring data from one server to another in the case of a failure

(abstract). It would have been obvious to one of ordinary skill in the art at the time of the invention to combine Wyman/Ohran/Badovinatz because, as the Applicant has pointed out in the background of the specification, if a primary sever cannot be reached by a user, a back up sever containing current licensing authorizations can communicate with the client machines and take over license management functions, thereby increasing the efficiency of the license management system.

Claim 4:

The combination of Wyman/Ohran/Badovinatz/Novaes discloses the limitations as shown above. With regard to the limitation of *each follower server is programmed such that it is capable of becoming a new leader server if the current leader server can no longer manage the distribution of allocations for the license servers,* Badovinatz, in column 2, lines 1-6, discloses, "The group leader recovery mechanism of the present invention provides a flexible technique for determining a new group leader, when the current group leader fails." In column 10, lines 38-42, Novaes discloses electing a new group leader from a Group leader membership list. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine Wyman/Ohran/Badovinatz/Novaes because, "It ensures that the members of the group are aware of the new group leader and can count on the group leader to control and manage the group (Badovinatz, column 2, lines 1-6)."

Claims 5 and 14:

The combination of Wyman/Ohran/Badovinatz/Novaes discloses the limitations as shown above. With regard to the limitation of *determining, by communications*

between the pool of license servers, when a particular license server can no longer manage a distribution of allocations to use the protected software. Badovinatz, however, in Figure 5a and related text, discloses selecting a new group leader when a current server has failed, and informing other servers of the change in leadership. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine Wyman/Ohran/Badovinatz/Novaes because, "It ensures that the members of the group are aware of the new group leader and can count on the group leader to control and manage the group (Badovinatz, column 2, lines 1-6)."

11.   Claims 6 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wyman/Ohran/Badovinatz/Novaes and further in view of Baratti et al. (GB 2,346,989).

Claims 6 and 15:

The combination of Wyman/Ohran/Badovinatz and Applicant's own admission discloses the limitations as shown above. Wyman/Ohran/Badovinatz/Novaes do not specifically disclose *the license servers are programmed for preventing the issuance of an authorization to use protected software unless a majority of license servers are functioning and capable of managing a distribution of allocations to use the protected software.* However, Baratti, in the abstract and related text, discloses. "For security, the license management system requires that at least the integer majority, M, of the plurality of license servers is active at any time..." It would have been obvious to one of ordinary skill in the art at the time of the invention to combine Wyman/Ohran/Badovinatz/Novaes with Baratti because this prevents the unintended distribution of licenses.

12.   Claims 7-10 and 16-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Wyman/Ohran/Badovinatz/Novaes and further in view of Bains et al. (US 5,579,222).

Claims 7 and 16:

The combination of Wyman/Ohran/Badovinatz/Novaes discloses the limitations

as shown above. Wyman/Ohran/Badovinatz/Novaes do not specifically disclose:

- *each client computer that has received an authorization from a particular*

    license server, and the particular license server that sent the

    authorization to the client computer, are programmed-for communicating

    heartbeats between each other; and

- *wherein each client computer that has received an authorization from a*

    particular license server is programmed for determining whether that

    particular license server is still capable of managing a distribution of

    allocations to use the protected software;

Bains, however, in column 7, lines 43-46, discloses using a ping to determine if a

server is still functioning properly. It would have been obvious to one of ordinary skill in

the art at the time of the invention to combine Wyman/Ohran/Badovinatz/Novaes with

Bains because using a periodic signal to ensure that a license server is operating

properly ensures that the usage rights associated with each license is not being

fraudulently manipulated.

Claims 8 and 17:

With regard to the limitation of *locating a new leader server,* Badovinatz

discloses designation a new leader in a group of processors when the current leader

fails, as shown in the rejection of claims 1 and 11 above. With regard to the limitation of *communicating a heartbeat from the client computer to the new leader server,* Bains, column 7, lines 43-46, discloses using a ping to determine if a server is still functioning properly, as shown in the rejection of claims 7 and 16 above. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine Wyman/Ohran/Badovinatz/Novaes with Bains because if, after determining that local license sever is no longer functional, a new license server must be selected to replace the licensing capabilities, thus maintaining an efficient and seamless licensing provision.

Claims 9 and 18:

The combination of Wyman/Ohran/Badovinatz/Applicant's own admission discloses the limitations as shown above. Wyman/Ohran/Badovinatz/Applicant do not specifically disclose:

- *determining if the new leader server had already issued an authorization to the client computer; and*

- *converting the heartbeat to a request for an authorization if the new leader server had not already issued an authorization to the client computer.*

However, Bains, in column 8, line 60 to column 9, line 20, discloses a lost signal to the license sever, wherein a temporary license may be issued, or a new license may be requested. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine Wyman/Ohran/Badovinatz/Novaes with Bains because if, after determining that local license sever is no longer functional, a new license server

must be selected to replace the licensing capabilities, and if a new request for a current license is warranted, thus maintaining an efficient and seamless licensing provision.

Claims 10 and 19:

The combination of Wyman/Ohran/Badovinatz/Applicant's own admission discloses the limitations as shown above. Wyman/Ohran/Badovinatz/Applicant do not specifically disclose:

- o *if a particular license server is no longer capable of managing a distribution of allocations to use the protected software, the memory in the particular license server is capable of receiving a new redundant license file and a new sequence number; and*

- o *if the particular license server is brought back on line and if the new sequence number is greater than any sequence number currently stored in the memory of the other license servers in the pool, the particular license server and the other license servers in the pool are programmed for transferring the new redundant license file to other license servers in the pool.*

However, Badovinatz in column 8, lines 1-44 discloses using sequence numbers to keep track of messages when a server fails or when a new leader server is selected. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine Wyman/Ohran/Badovinatz/Novaes with Bains because if, after determining that local license sever is no longer functional, a new license server must be selected to

replace the licensing capabilities there must be an assurance that the new server leader has a current list of license data.

Claim 20:

With regard to the limitations of:

- *coupling at least one client computer to the communication network for enabling the at least one client computer to issue a request for an authorization to use the protected software over the communication network;*

- *coupling a pool of license servers to the communication network, each license server managing a distribution of allocations to at least one client computer to use the protected software;*

- *selecting one of the license servers in the pool as a current leader server and maintaining a record of allocations for license servers in the pool with the current leader server;*

- *designating other license servers that are not the current leader server as follower servers; and*

- *selecting one of the follower servers as a new leader server whenever the current leader server can no longer manage the distribution of allocations for the license servers;*

See the rejections of claims 4 and 11 above.

Claims 21-25 and 29-36:

With regard to the limitations of:

- *the current leader server is programmed for communicating a heartbeat to each follower server;*

- *each follower server is programmed for communicating an acknowledgement to the current leader server in response to the heartbeat; and*

- *the current leader server designates a follower server as being down if no acknowledgement is received from that follower server;*

- if a follower server does not receive the heartbeat from the current leader, then the follower server that did not receive the heartbeat sends a check message to the current leader; and

- if the follower server that did not receive the heartbeat does not receive a response from the current leader in reply to the check message, then the follower server that did not receive the heartbeat starts an election process to elect a new current leader;

- if a follower server becomes the new leader server, then the new leader server sends a heartbeat to each of the remaining follower servers; and

- each of the remaining follower servers communicates the status of the allocations for that particular follower server to the new leader server;

- the first license server to begin operation in the pool of license servers is designated as the current leader server;

- the current leader server maintains a list that indicates whether or not each particular follower server is in operation;

- the current leader server sends the list to each follower server; and

- the follower servers use the information contained in the list to select a new leader server if the current leader server can no longer manage the distribution of allocations for the license servers;

- each client computer that has received an authorization from a particular license server, and the particular license server that sent the authorization to the client computer, are programmed for communicating heartbeats between each other;

- each client computer that has received an authorization from a particular license server also receives a leader priority list from that particular license server;

- each client computer that has received an authorization from a particular license server is programmed for determining whether that particular license server is still capable of managing a distribution of allocations to use the protected software; and

- each client computer that has received an authorization from a particular license server but has determined that particular license server is no longer capable of managing a distribution of allocations to use the protected software is programmed for locating another license server by using the leader priority list;

○   the current leader server manages a distribution of allocations to

more than one client computer to use the protected software.

○   a first follower server authorizes a first client computer to use the

protected software; and

○   the current leader server authorizes a second client computer to use the

protected software;

Badovinatz discloses procedure if a processor fails (column 7, lines 45-56), and

the process of selecting a group leader, including new leader lists (column 5, line 33 to

column 7, line 44). Novaes, in column 11, line 50 to column 12, line 14 also discloses a

leadership change protocol, as well as an election of the new leader server.

Conclusion

13.   Applicant's amendment necessitated the new ground(s) of rejection presented in this

Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **James A. Reagan** whose telephone number is **(703) 306-9131**. The examiner can normally be reached on Monday-Friday, 9:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **James Trammell** can be reached at (703) 305-9768.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the **Receptionist** whose telephone number is **(703) 305-3900**.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 305-7687   [Official communications; including
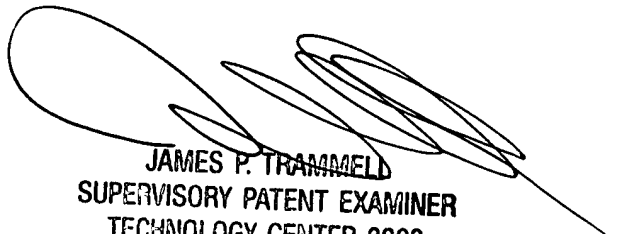
After Final communications labeled "Box AF"]

(703) 308-1396   [Informal/Draft communications, labeled "PROPOSED" or "DRAFT"]

Hand delivered responses should be brought to Crystal Park 5, 2451 Crystal Drive, Arlington, VA, 7th floor receptionist.

JAR

01 October 2003

JAMES P. TRAMMELL
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600